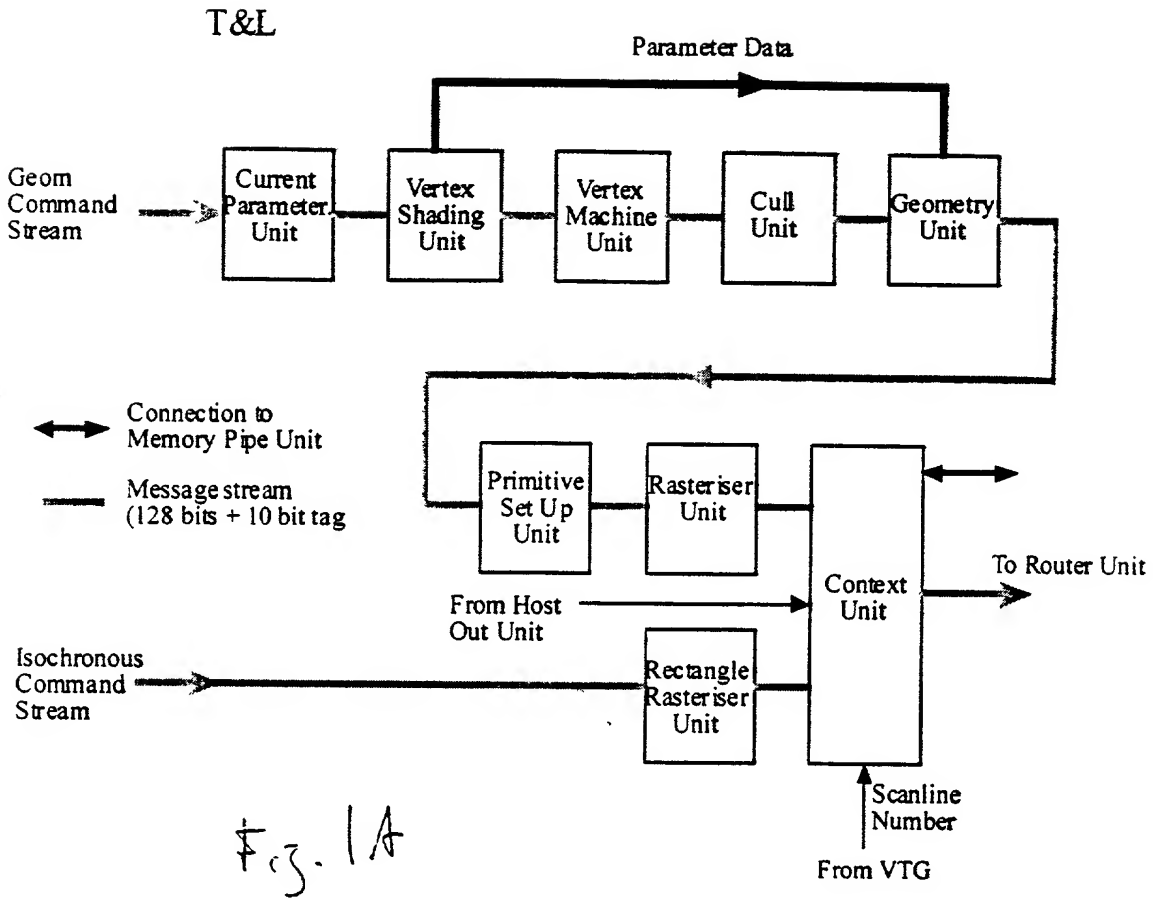
T&L
Parameter Data
Geom Command Stream
Current Parameter Unit
Vertex Shading Unit
Vertex Machine Unit
Cull Unit
Geometry Unit
Connection to Memory Pipe Unit
Message stream (128 bits + 10 bit tag
Primitive Set Up Unit
Rasteriser Unit
Context Unit
To Router Unit
From Host Out Unit
Isochronous Command Stream
Rectangle Rasteriser Unit
Scanline Number
From VTG

Fig. 1A

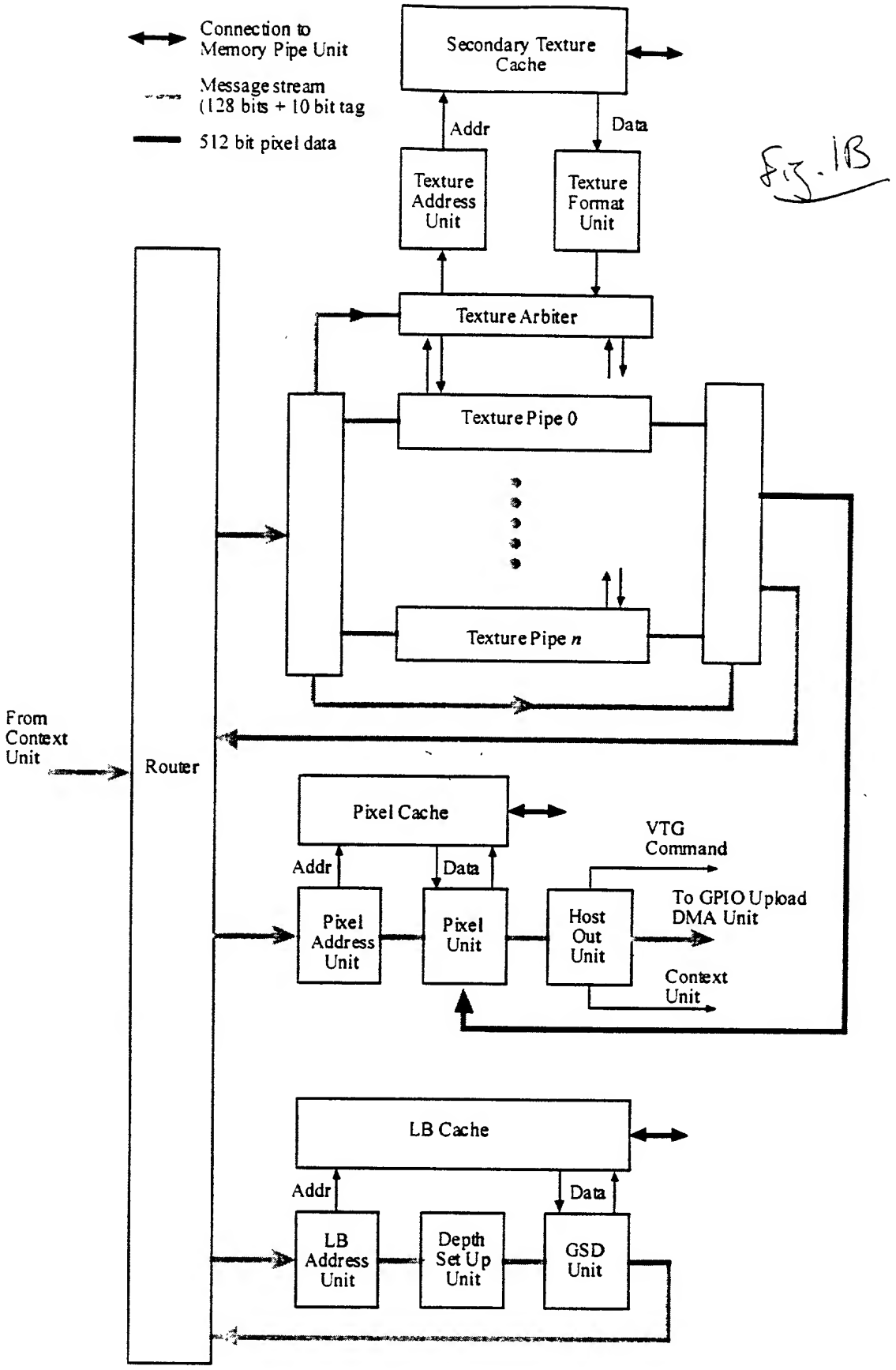
Connection to Memory Pipe Unit
Message stream (128 bits + 10 bit tag
512 bit pixel data
Secondary Texture Cache
Addr
Data
Texture Address Unit
Texture Format Unit
Texture Arbiter
Texture Pipe 0
Texture Pipe n
From Context Unit
Router
Pixel Cache
Addr
Data
VTG Command
Pixel Address Unit
Pixel Unit
Host Out Unit
To GPIO Upload DMA Unit
Context Unit
LB Cache
Addr
Data
LB Address Unit
Depth Set Up Unit
GSD Unit

Fig. 1B

Replaced Sheet

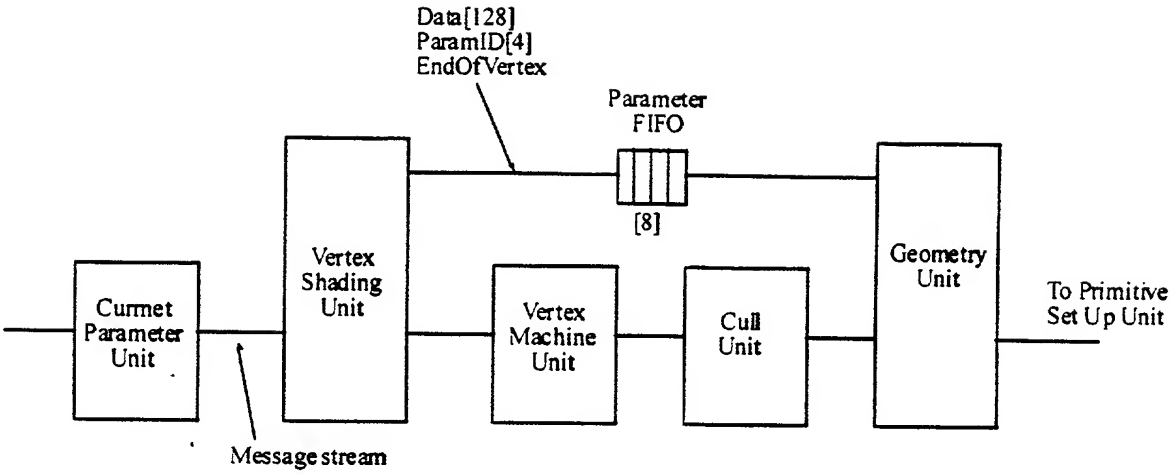

Figure 1C

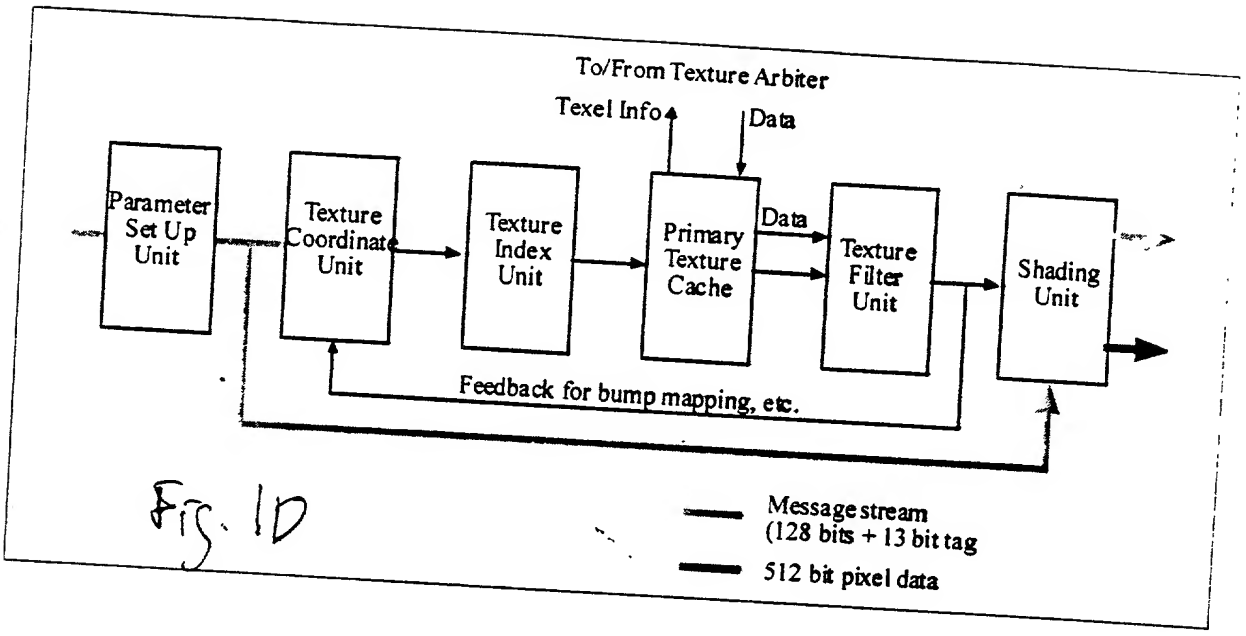
To/From Texture Arbiter
Texel Info
Data
Parameter Set Up Unit
Texture Coordinate Unit
Texture Index Unit
Primary Texture Cache
Data
Texture Filter Unit
Shading Unit
Feedback for bump mapping, etc.
Message stream (128 bits + 13 bit tag
512 bit pixel data

Fig. 1D

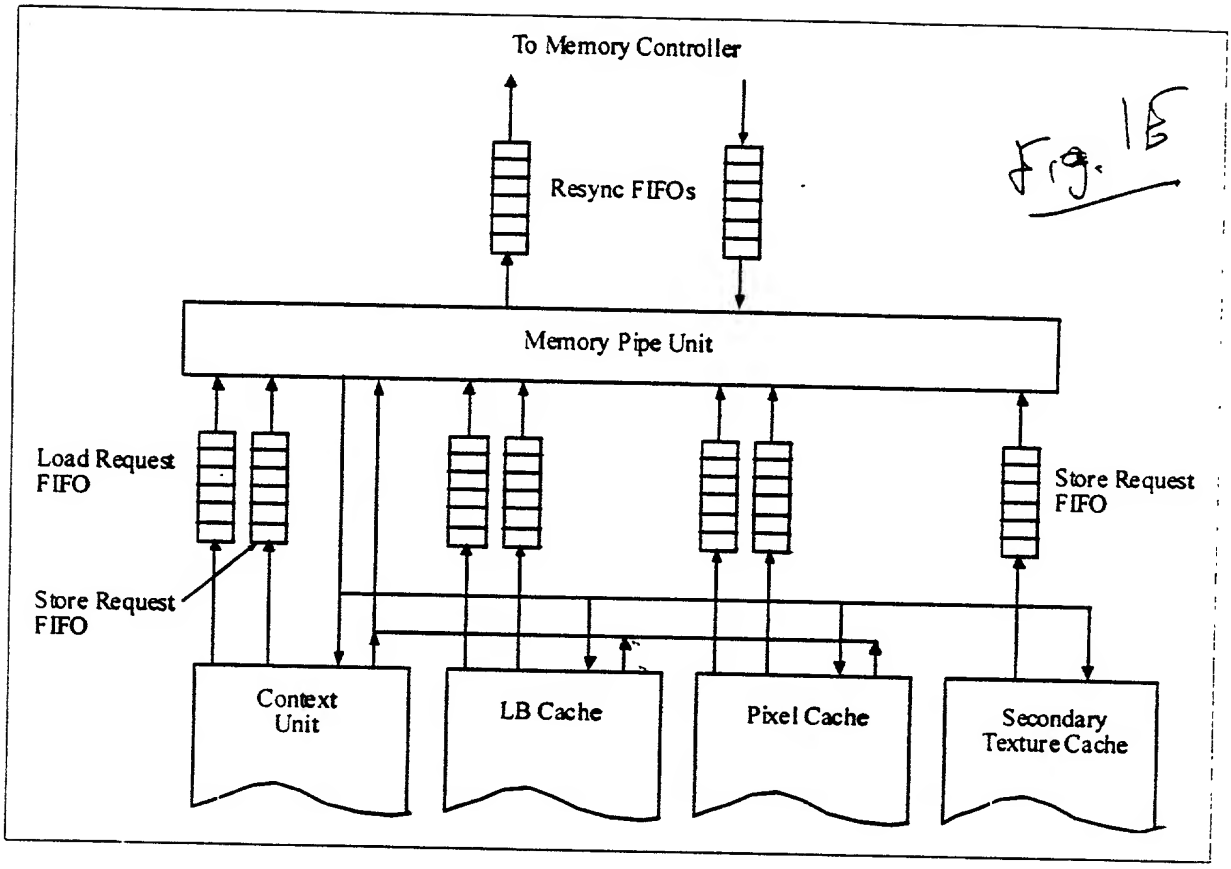
To Memory Controller
Resync FIFOs
Memory Pipe Unit
Load Request FIFO
Store Request FIFO
Store Request FIFO
Context Unit
LB Cache
Pixel Cache
Secondary Texture Cache

Fig. 1E

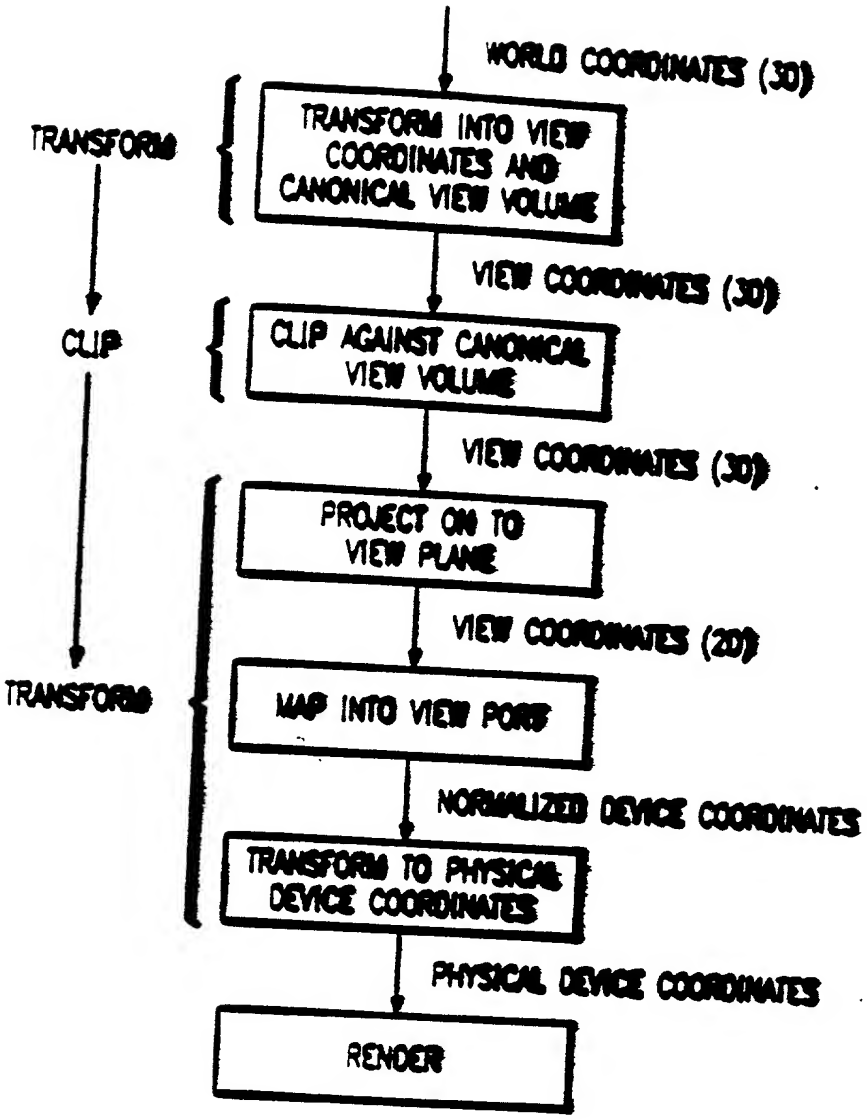
WORLD COORDINATES (3D)
TRANSFORM
TRANSFORM INTO VIEW COORDINATES AND CANONICAL VIEW VOLUME
VIEW COORDINATES (3D)
CLIP
CLIP AGAINST CANONICAL VIEW VOLUME
VIEW COORDINATES (3D)
PROJECT ON TO VIEW PLANE
VIEW COORDINATES (2D)
TRANSFORM
MAP INTO VIEW PORT
NORMALIZED DEVICE COORDINATES
TRANSFORM TO PHYSICAL DEVICE COORDINATES
PHYSICAL DEVICE COORDINATES
RENDER

Figure 2